

**SYNCHRONIZATION AND CALIBRATION OF CLOCKS FOR A
MEDICAL DEVICE AND CALIBRATED CLOCK**

ABSTRACT OF THE INVENTION

Apparatus and method support the synchronization and calibration of a plurality of clocks in a medical device system that may provide treatment to a patient with a nervous system disorder. The plurality of clocks, which may be located at different components of the medical device system, comprises a first clock and a second clock. The second clock may be synchronized to a first clock by disabling a run mode operation and setting the second clock to a selected time. When a reference time of the first clock approximately equals the selected time, the second clock enables the run mode operation. Additionally, a drift time that is indicative of a time difference between the first clock and the second clock is determined. If the drift time is greater than a predetermined amount, an indication to resynchronize the first and second clocks is provided.